anti-HBc and HBsAg.01Univariate and multivariate analyses were performed.

Results: Overall, 10.049 individuals were included; the prevalence of anti-HBc was: South 9,59% (IC 95% 8,46-10,7%); Southeast 6,33% (IC95% 5,32-7,33; North region 10,9% (IC 95% 8,87-12,9). HBsAg positivity was 0,48% (IC 95% 0,21-0,75) in South; Southeast 0,31% (IC95% 0,09-0,53) and 0,63% (IC95% 0,22-1,04) in Northregion. The results of the final multivariate model showed that, among others, increasing age remained as independent risk factors in three regions.

Conclusion: Our survey classified the South and Southeast region of Brazil as low HBV endemicity areas, as well as North region, world famous as a highly endemicity, demonstrating the impact as vaccination in these three regions. The results of the final multivariate model reinforce the need for extensive HBV vaccine coverage among adolescents to prevent viral infection.

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Epidemiology of human leptospirosis in Mayotte and identification of circulating *Leptospira* isolates

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Background: Leptospirosis is an emerging zoonosis, with high incidence in countries with a tropical climate. The disease is endemic, when reported, in most countries of the Indian Ocean.

Methods: In Mayotte, a French overseas department, located in the northern Mozambique Channel in the Indian Ocean, surveillance of leptospirosis is based on Real-time PCR confirmed autochthonous cases. Isolates of leptospira are send to the French National Reference Center for Leptospirosis for sero- and genotyping. Surveillance of leptospirosis on the island was progressively reinforced since July 2008.

Results: From 2007 to 2010 period, a total of 196 autochthonous cases of leptospirosis were confirmed in Mayotte, with an overall annual incidence of 25 cases per 100 000. Young adult males are the most highly infected group. Seasonality of leptospirosis on the island is very marked, with cases occurring mainly during the rainy season. The strongest correlation (r=0.838) between monthly number of cases and monthly cumulated rainfall is found three months after the peak of rainfall. Risk factors for infections by leptospires in Mayotte are multiple, with exposure of the general population during activities of daily living along with occupational exposure.

Multilocus sequence typing results show that *L. borgpetersenii* constitutes the main agent of leptospirosis in Mayotte (68%). Serogroup Mini, including strains cross reacting with Mini and Hebdomadis, represents the predominant serogroup (70%). Other *Leptospira* serogroups identified were Pyrogenes, Grippotyphosa, and Pomona. No Icterohaemorrhagiae was detected. Serogroup and genotype distribution differs from what is observed in other countries in the region.

Conclusion: Further studies in humans and animals are needed to learn more on these specificities and allow guiding future actions.

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A measles case study in a traveller: an international challenge

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Background: Although endemic measles transmission has been interrupted in Portugal, importation of this highly infectious virus continues.

In January 2012, one case of measles in an unvaccinated Portuguese 33-year-old-woman, travelling from United Kingdom to Lisbon, resulted in a large number of exposures in the community and in two hospitals health care workers.

Methods: After serological confirmation (positive measles-specific IgM antibody test), the National Health Authorities was immediately informed to get on contact tracing of the airline passengers, the ambulatory healthcare centre and the community contacts.

All hospital providers were individuated, and questioned about previous natural disease or immunisation against measles.

Results: On January 29th, 2012, the patient was evaluated in the ED with fever (39 °C), cough and coryza and sent home with symptomatic medication.

Twenty-four hours later the patient returned to the ED with persistent fever, generalized maculopapular rash and was hospitalized.

Measles diagnosis was suspected and, about 10 hour after admission on ED, she was transferred to a referral hospital.

Among the 44 potentially exposed employees: 25 (56,8%) referred previous measles, 15 (34,1%) reported to have received immunisation, but 7 received just one dose of MMR, and 4 (9,1%) referred not to be vaccinated.

One HIV infected patient shared the room with the index case during the first 16 hours. She was managed as susceptible case and isolated due to high risk of acquisition and development of atypical measles.

All susceptible cases continue on active surveillance. After 10 days, no secondary cases were reported.

We will present complete maps of itineraries, places visited and contacts with index case, in London and Portugal, before hospitalisation.

Conclusion: This case highlights the challenges faced by clinicians with respect to a disease that is receding in memory and importance.

Despite a high community vaccination coverage in Portugal, the risk of measles outbreak should be considered among clusters